

RESEARCH NOTE

FIRST RECORD OF NET COLLECTED *OCYTHÖE TUBERCULATA* (CEPHALOPODA: OCTOPODA) FROM PERUVIAN WATERS

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ABSTRACT

Ocythöe tuberculata Rafinesque, 1814, is recorded from net captured animals for the first time from Peruvian waters, thus confirming its presence in the southeastern Pacific Ocean. Three specimens were captured in oceanic waters at depths from 10 to 180 m. These records are consistent with the known epipelagic distribution of *O. tuberculata*.

The literature on cephalopods contains numerous records of the pelagic octopod *Ocythöe tuberculata* Rafinesque, 1814 (see review in Roper and Sweeney, 1976). Collectively, these reports suggest that *O. tuberculata* is distributed in warm waters, however, it has not been recorded from the tropics or from the southern hemisphere except for captures in the eastern South Atlantic off South Africa (Voss, 1967a) and in the far eastern Indian Ocean off Australia (Roper and Sweeney, 1976; Lu and Phillips, 1985).

As part of my current studies on the pelagic cephalopods from Peruvian waters, three net collected *Ocythöe tuberculata* were located in the collections of the Instituto del Mar del Perú (IMARPE) and the Museo de Historia Natural, Universidad Nacional Mayor de San Marcos (MUSM). These specimens represent the first net captures of *O. tuberculata* from Peruvian waters. The measurements and indices used herein are defined by Pickford and McConnaughey (1949) and Roper and Voss (1983).

Ocythöe tuberculata Rafinesque, 1814

Material examined. - 1 female, ML = 66.8 mm, R/V HUMBOLDT, Cruise 8202, 17° 02'S, 77° 42.5'W, 180 m, 988/400 mesh pelagic trawl, 24 Feb 1982, T. Dioses leg., IMARPE M46.011. - 1 female, ML = 105.0 mm, EUREKA XLVII, 14° 24'S, 77° 13'W, 30-40 m, purse seine, 27 Feb 1982, W. Elliott and M. Niquen leg., IMARPE M46.012. - 1 male, ML = 15.6 mm, R/V SNP-1, Cruise 8805-06, 16° 49.6'S, 72° 49.4'W, 10-40 m, 434/400 mesh pelagic trawl, 22 May 1988, A. Chipollini leg., MUSM 460101.

The specimens, typical of the species, have arm pairs

II and III much shorter than arm pairs I and IV, ventral water pores only, web greatly reduced, and a complicated mantle-funnel locking apparatus that is unique among the octopods. The ventral surface of the mantle of the females is covered by tubercles in a reticulate pattern. The much smaller male lacks the dermal tubercles and has the right arm III hectocotylized and enrolled in a membranous sac. All three specimens are sexually immature (Table 1).

Distribution. - The three specimens were taken singly in Peruvian waters, between latitudes 14° and 18°S (Fig. 1). The two females were collected in association with subtropical surface-water masses. The male was collected in association with coastal cold-water masses (21.3°C, S = 34.987 ‰). All specimens were captured with non-closing nets in oceanic waters.

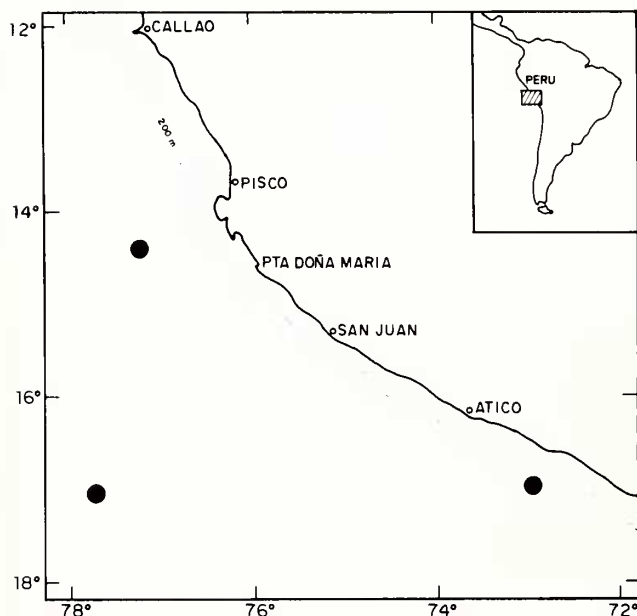
DISCUSSION

Roper and Sweeney (1976) summarized the records of *Ocythöe tuberculata* from the Mediterranean Sea, the North and eastern South Atlantic Oceans, and the North Pacific Ocean and described the first occurrence of the species from the Indian Ocean off Australia. Lu and Phillips (1985) gave the known range of *O. tuberculata* in Australian waters as from New South Wales to the Great Australian Bight. Based on analyses of stomach contents, Shchetinnikov (1986) listed *O. tuberculata* as a food item of the giant ommastrephid squid *Dosidicus gigas* from off Peru. The Peruvian specimens described here represent the first net captures of *O. tuberculata* from the eastern South Pacific Ocean.

The known depth distribution of *Ocythöe tuberculata*

Table 1. Measurements (in mm) and indices of *Ocythoe tuberculata* (a = approximate value; b = arm enrolled in sac).

Specimen	IMARPE M46.011		IMARPE M46.012		MUSM 460101	
	Female		Female		Male	
Mantle length	66.8		105.0		15.6	
Mantle width	34.1 ^a		63.8		11.5	
Head width	19.6		41.4		9.8	
Arm lengths	L	R	L	R	L	R
I	118.0	113.7	231.4	230.0	40.6	42.7
II	71.4	71.0	171.4	181.6	21.0	21.5
III	69.3	61.9	150.8	150.0	17.2	9.3 ^b
IV	108.7	98.4	199.2	215.0	43.4	43.8
Hectocotylized arm length	—		—		9.3 ^b	
Total length	182.2		330.0		60.6	
Mantle width Index	51.0 ^a		60.8		73.7	
Head width Index	29.3		39.4		62.8	
Arm length Index	64.8		70.1		72.3	
Mantle arm Index	56.6		45.4		35.6	
Hectocotylized Index	—		—		21.2 ^b	
No. gill lamellae	17		18		10	

Fig. 1. Localities of specimens of *Ocythoe tuberculata* from Peruvian waters.

indicates that it is limited to near-surface waters (Voss, 1967b; Roper and Young, 1975). Capture records by Roper and Sweeney (1976) from the Sargasso and the Mediterranean seas (0 to 200 m) and my data (10 to 180 m) indicate that *O. tuberculata* inhabits the epipelagic zone.

Ocythoe tuberculata is known from six areas: Mediterranean Sea; North and eastern South Atlantic Oceans; North and eastern South Pacific Oceans; southeastern Indian Ocean. It is an epipelagic and possibly cosmopolitan species in warm oceanic waters. Its occurrence in tropical waters remain unconfirmed.

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